

REMARKS

Claims 1-10 stand rejected, and claims 11-22 are withdrawn from consideration as being directed to a non-elected invention.

Claims 8-10 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29-31 of co-pending Application No. 10/654,888 to Araki et al.

Although acknowledging that claims 29-31 (original claims 1-3 of the co-pending application) fail to recite the presence of a cure site, the Examiner relies on the specification of the '888 application as disclosing that a cure site may be present in the copolymer (B) in a side chain of a polymer and/or at an end of a trunk chain of the polymer (or also in the Rf group, citing page 57, lines 3-20). Based thereon, the Examiner considered that it would have been obvious to modify the composition (of claims 29-31 of the '888 application) to incorporate a cure site in Rf of structural unit M of claim 8 of the present application.

Applicants respectfully traverse for the following reasons.

When considering whether the invention defined in a claim of an application is an obvious variation of the invention defined in the claim of a reference application (which is the basis of the obviousness-type double patenting rejection), the disclosure of the reference application may not be used as prior art. MPEP § 804 (pg. 800-22 August 2001).¹

¹ An exception is that those portions of the specification which provide support for the claims of the reference application may also be considered when addressing whether a claim in the application defines an obvious variant of an invention claimed in the reference application.

Here, although the specification of the '888 application discloses that Rf may contain a cure site, such disclosure is not support for Rf which is defined in claim 29 of the '888 application as having 1 to 5 $>C=O$ units.

For this reason, it is respectfully submitted that claims 8-10 are not obvious variants of the invention defined in claims 29-31 of the '888 application, and withdrawal of the foregoing obvious-double patenting rejection is respectfully requested.

Claims 1-7 were rejected under 35 U.S.C. § 102(a) as being anticipated by EP 1 072 905 A1 to Koike et al.

The Examiner cited Koike et al. as disclosing a composition useful in making light transmitting devices substantially as claimed, prepared by mixing a non-crystalline polymer (a) and a metal chelate compound (b). As to the claimed "prepolymer", Koike et al. was cited as disclosing fluorinated copolymers having non-fluorinated comonomer(s) which may carry a functional group and/or a residual carbon-carbon double bond on a main chain as a pendant group (side chain) or end group (end of a trunk chain of the polymer). Because Koike et al. discloses fluoropolymers having no C-H bond, the Examiner considered that the terms of claims 2-4 are met (low absorption). As to the presence of carbon-carbon double bonds for use as a cure site, the Examiner cites to page 4, lines 33-43 of Koike et al.

Applicants traverse, and respectfully request the Examiner to reconsider for the following reasons.

The composition of present claim 1 comprises (i) a fluorine-containing prepolymer, and (ii) a compound containing a rare-earth metal ion and/or a rare-earth metal element. The

fluorine-containing prepolymer (1) is a non-crystalline polymer having a fluorine content of not less than 25 % by weight, and the fluorine-containing prepolymer (1) has a cure site in a side chain of the polymer and/or at an end of a trunk chain of the polymer.

Turning to the cited prior art, Koike et al. fails to disclose a fluorine-containing polymer having a cure site. Koike et al. describes non-crystalline fluorine-containing polymers at paragraphs [0016] to [0017]. However, there is no disclosure of a curable polymer. As to the fluorine-containing acrylic units represented by Formulae (1) to (3) in paragraph [0017], R^1 to R^6 are F or CF_3 , which are not cure sites. Thus, Koike et al. does not disclose the fluorine-containing prepolymer (I) of present claim 1, and withdrawal of the foregoing rejection under 35 U.S.C. § 102(a) is respectfully requested.

Claims 1-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,869,693 to Fryd et al. in view of Koike et al.

Fryd et al. was cited as disclosing the preparation of polymers having attached luminescent metal complexes, the polymers encompassing fluoropolymers and other types of polymers or copolymers including polyvinyl ethers or polyacrylates used to carry functional groups (citing column 4, lines 11-27). Because only some of the functional groups are said to form metal chelate complexes, the Examiner considered Fryd et al. as disclosing the claimed prepolymer including some residual functional groups said to be equivalent to the claimed cure site.

The Examiner relied on Koike et al. as teaching a composition for making a light transmitting device prepared by mixing a non-crystalline perfluoropolymer containing no C-H bond with a fluorinated metal-betadecarboxyl chelate compound.

The reason for rejection was that it would have been obvious to modify Fryd et al.'s prepolymeric composition by using an ether-type fluoropolymer carrying a fluorinated metal chelate as a moiety inside the polymer's pendant group as taught by Koike et al., to thereby obtain a better and more diversified fluorinated copolymer having improved optical transmission properties.

Applicants traverse, and respectfully request the Examiner to reconsider for the following reasons.

As shown above, Koike et al. does not disclose or teach the curing of a non-crystalline fluorine-containing polymer and chelate compound. The problem pursued by Koike et al. relates to dispersing the chelate compound in a non-crystalline polymer with a concentration gradient in a specific direction (Abstract). However, in order to obtain the object of Koike et al., there is no reasonable approach allowing for introduction of the chelate compound of Koike et al. into the side chain of the polymer of Fryd et al. A dispersion in a blend of the chelate compound and polymer is contrary to and patentably distinct from incorporating the chelate compound in a polymer side chain. Thus, it is respectfully submitted that the present claims are patentable over the combination of Fryd et al. and Koike et al., and withdrawal of the foregoing rejection under 35 U.S.C. § 103(a) is respectfully requested.

This application is subject to a restriction. If elected species (6) is found to be patentable, Applicants respectfully request examination of generic claim 1. If claim 1 is found to be patentable, then Applicants respectfully request the Examiner to withdraw the Election of Species requirement with respect to dependent claims 11-17.

Withdrawn claims 18-22 are drawn to an optical amplifying device or a light-emitting device made of the fluorinated resin composition of claim 1. Therefore, should claim 1 be found to be allowable, Applicants respectfully request the Examiner to withdraw the restriction requirement and to also allow claims 18-22 containing the same patentable features as claim 1.

Withdrawal of all rejections and allowance of claims 1-22 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, DC telephone number indicated below.

Respectfully submitted,



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